

CLAIM LISTING

1. (currently amended) A surgical instrument comprising:
a nozzle that is shaped to form a liquid jet;
a pressure lumen configured and positioned to convey a flow of liquid to the nozzle;
an evacuation lumen comprising a jet-receiving opening locatable opposite the nozzle to receive at least a portion of the liquid jet emitted from the nozzle, when the instrument is in operation, and which is configured and positioned to convey a flow of liquid away from the jet-receiving opening; and
a non-liquid jet tissue-~~cutting -excision~~ component constructed and positioned to excise tissue during the surgical procedure, wherein the nozzle is positioned, during operation of the instrument, to direct the liquid jet so as to contact tissue excised by the non-fluid jet tissue-~~cutting -excision~~ component during a surgical procedure.
2. (currently amended) The surgical instrument of claim 1, wherein the non-liquid jet tissue-~~cutting -excision~~ component is configured to not rotate, when the instrument is in operation.
3. (currently amended) The surgical instrument of claim 2, wherein the non-liquid jet tissue-~~cutting -excision~~ component is configured to remain stationary with respect to the position of the nozzle.
4. (cancelled)
5. (cancelled)
6. (currently amended) The surgical instrument of claim 1, further comprising:
a tissue receptacle configured and positioned to contain tissue excised by the tissue-~~cutting -excision~~ component, wherein the nozzle is positioned, during operation of the instrument, to direct the liquid jet so that at least a portion of the liquid jet is contained within the receptacle.
7. (original) The surgical instrument of claim 6, wherein the tissue receptacle is cup-shaped.
8. (currently amended) The surgical instrument of claim 7, wherein at least a portion of the rim of the receptacle is sufficiently sharp to form a tissue-cutting blade comprising the non-liquid jet tissue-~~cutting -excision~~ component.
9. (original) The surgical instrument of claim 1, wherein the surgical instrument comprises a device selected from the group consisting of: a curette, a rongeur, a bone punch, bone-cutting forceps, a morcellator, and a surgical micrograsper.
10. (original) The surgical instrument of claim 1, wherein the surgical instrument comprises a curette.
11. (original) The surgical instrument of claim 1, wherein the pressure lumen is configured

to enable it to convey a high-pressure liquid at a pressure of at least 1,000 psig.

12. (original) The surgical instrument of claim 11, wherein the pressure lumen is configured to enable it to convey a high-pressure liquid at a pressure of at least 2,000 psig.

13. (original) The surgical instrument of claim 12, wherein the pressure lumen is configured to enable it to convey a high-pressure liquid at a pressure of at least 3,000 psig.

14. (original) The surgical instrument of claim 13, wherein the pressure lumen is configured to enable it to convey a high-pressure liquid at a pressure of at least 5,000 psig.

15. (original) The surgical instrument of claim 14, wherein the pressure lumen is configured to enable it to convey a high-pressure liquid at a pressure of at least 10,000 psig.

16. (original) The surgical instrument of claim 15, wherein the pressure lumen is configured to enable it to convey a high-pressure liquid at a pressure of at least 15,000 psig.

17. (original) The surgical instrument of claim 16, wherein the pressure lumen is configured to enable it to convey a high-pressure liquid at a pressure of at least 30,000 psig.

18. (cancelled)

19. (cancelled)

20. (currently amended) The surgical instrument of claim 1, wherein the evacuation lumen is shaped and positioned to enable it to remove from a surgical site at least a portion of tissue excised by the tissue-cutting -excision component during operation.

21. (original) The surgical instrument of claim 1, further comprising:

a distal end adapted to perform a surgical procedure on a patient, wherein the distal end of the surgical instrument has a shape and size selected to facilitate insertion of the distal end into a region of the body of the patient defining a surgical site.

22. (original) The surgical instrument of claim 21, wherein the region of the body of the patient defining a surgical site is the spine of the patient.

23. (cancelled)

24. (original) The surgical instrument of claim 1, wherein the evacuation lumen is shaped and positionable to enable evacuation of essentially all of the liquid comprising the liquid jet from the jet-receiving opening to a proximal end of the instrument, without the need for an external source of suction.

25. (original) The surgical instrument of claim 1, further comprising:

a proximal end adapted to facilitate control of the instrument by an operator; and a handle at the proximal end of the instrument.

26. (original) The surgical instrument of claim 25, wherein the handle comprises a grasping region shaped and positioned to facilitate gripping by a hand of an operator of the instrument.

27. (cancelled)

28. (cancelled)

29. (currently amended) The surgical instrument of claim 1, wherein the non-liquid jet tissue ~~cutting -excision~~ component comprises a mechanical cutter.

30. (original) The surgical instrument of claim 29, wherein the mechanical cutter comprises a sharpened blade.

31. (original) The surgical instrument of claim 1, wherein a distance separating the jet-receiving opening of the evacuation lumen from the nozzle defines a length of the liquid jet emitted from the nozzle.

32-38. (cancelled)

39. (original) A kit comprising the surgical instrument of claim 1, in combination with instructions directing an operator to dispose of at least a portion of the instrument after a single use.

40. (original) The kit of claim 39, wherein the instructions direct an operator to dispose of only a portion of the instrument after a single use and to reuse the remainder of the instrument.

41. (currently amended) The kit of claim 40, wherein the instructions direct an operator to dispose of at least one of the pressure lumen, the evacuation lumen, the nozzle, and the non-liquid jet tissue ~~cutting -excision~~ component.

42. (original) The kit of claim 39, wherein the instructions direct an operator to dispose of the entire instrument after a single use.

43. (currently amended) The surgical instrument of claim 1, further comprising: a distal end adapted to perform a surgical procedure on a patient, wherein the nozzle is positioned at the distal end of the instrument and is configured such that the liquid jet emitted by the nozzle and directed so as to contact the tissue excised by the non-fluid jet tissue ~~cutting -excision~~ component is able to cut at least a portion of the excised tissue and/or drive at least a portion of the excised tissue into and at least partially through the evacuation lumen.

44. (currently amended) A surgical instrument comprising:
a nozzle that is shaped to form a liquid jet;
a pressure lumen configured and positioned to convey a flow of liquid to the nozzle;
an evacuation lumen comprising a jet-receiving opening locatable opposite the nozzle to receive at least a portion of the liquid jet emitted from the nozzle, when the instrument is in operation, and which is configured and positioned to convey a flow of liquid away from the jet-receiving opening; and

a non-liquid jet, non-rotating tissue-~~cutting -excision~~ component constructed and positioned to excise tissue during the surgical procedure.

45. (currently amended) The surgical instrument of claim 44, further comprising:
a tissue receptacle configured and positioned to contain tissue excised by the non-liquid jet, non-rotating tissue-~~cutting~~ excision component, wherein the nozzle is positioned, during operation of the instrument, to direct the liquid jet so that at least a portion of the liquid jet is contained within the receptacle.
46. (original) The surgical instrument of claim 45, wherein the tissue receptacle is cup-shaped.
47. (original) The surgical instrument of claim 44, wherein the pressure lumen is configured to enable it to convey a high-pressure liquid at a pressure of at least 1,000 psig.
48. (currently amended) The surgical instrument of claim 44, wherein the evacuation lumen is shaped and positioned to enable it to remove from a surgical site at least a portion of tissue excised by the non-liquid jet, non-rotating tissue-~~cutting -excision~~ component during operation.
49. (original) The surgical instrument of claim 44, wherein the evacuation lumen is shaped and positionable to enable evacuation of essentially all of the liquid comprising the liquid jet from the jet-receiving opening to a proximal end of the instrument, without the need for an external source of suction.
50. (original) The surgical instrument of claim 44, further comprising:
a distal end adapted to perform a surgical procedure on a patient, wherein the distal end of the surgical instrument has a shape and size selected to facilitate insertion of the distal end into a region of the body of the patient defining a surgical site.
51. (original) The surgical instrument of claim 50, wherein the region of the body of the patient defining a surgical site is the spine of the patient.
52. (original) The surgical instrument of claim 44, wherein the surgical instrument comprises a device selected from the group consisting of: a curette, a rongeur, a bone punch, bone-cutting forceps, a morcellator, and a surgical micrograsper.
53. (original) The surgical instrument of claim 44, wherein the surgical instrument comprises a curette.
54. (cancelled)
55. (currently amended) A surgical instrument comprising:
a non-liquid jet tissue-~~cutting -excision~~ component constructed and positioned to excise tissue during a surgical procedure;
a tissue receptacle configured and positioned to contain tissue excised by the tissue-~~cutting -excision~~ component;

a nozzle that is shaped to form a liquid jet and is positioned to direct the liquid jet so that at least a portion of the liquid jet is contained within the receptacle, when the instrument is in operation; and

a pressure lumen configured and positioned to convey a flow of liquid to the nozzle.

56. (original) The surgical instrument of claim 55, wherein the tissue receptacle is cup-shaped.

57. (currently amended) The surgical instrument of claim 56, further comprising:

a distal end adapted to perform a surgical procedure on a patient, wherein the receptacle is positioned at the distal end of the instrument and comprises a rim, at least a portion of said rim being configured and positioned to provide a sharpened cutting blade defining the non-liquid jet ~~tissue-cutting -excision~~ component constructed and positioned to excise tissue during the surgical procedure.

58. (original) The surgical instrument of claim 55, wherein the surgical instrument comprises a device selected from the group consisting of: a curette, a rongeur, a bone punch, bone-cutting forceps, a morcellator, and a surgical micrograsper.

59. (original) The surgical instrument of claim 55, wherein the surgical instrument comprises a curette.

60. (original) The surgical instrument of claim 55, wherein at least an outlet portion of the nozzle is contained within the receptacle.

61. (cancelled)

62. (original) A surgical instrument comprising:

a cup-shaped tissue receptacle configured and positioned to contain tissue;

a nozzle that is shaped to form a liquid jet and is positioned to direct the liquid jet so that at least a portion of the liquid jet is contained within the receptacle, when the instrument is in operation; and

a pressure lumen configured and positioned to convey a flow of liquid to the nozzle.

63. (original) The surgical instrument of claim 62, further comprising:

a distal end adapted to perform a surgical procedure on a patient, wherein the receptacle is positioned at the distal end of the instrument and comprises a rim defining a tissue-contacting periphery thereof.

64. (cancelled)

65. (original) The surgical instrument of claim 63, wherein the rim of the receptacle is sharpened to provide a tissue-cutting edge.

66. (original) The surgical instrument of claim 62, wherein the surgical instrument comprises a curette.

67. (cancelled)

68. (original) A surgical instrument comprising:

a curette device comprising:

a nozzle that is shaped to form a liquid jet and a pressure lumen configured and positioned to convey a flow of liquid to the nozzle.

69. (original) The surgical instrument of claim 68, wherein the curette device further comprises:

an evacuation lumen comprising a jet-receiving opening locatable opposite the nozzle to receive at least a portion of the liquid jet emitted from the nozzle, when the instrument is in operation, and which is configured and positioned to convey a flow of liquid away from the jet-receiving opening.

70-74. (cancelled)